Robot Love

By Margaret Ryznar*

Researchers have been developing a sophisticated humanoid robot that people in the future may want to marry. A human-robot marriage would pose challenges to lawmakers, including whether robots could be granted custody of children or access to family bank accounts. Any intimate relationship between humans and robots, however, may pose challenges to the current understanding of family law. For skeptics of such a future, it remains an interesting thought experiment, nonetheless.

I. INTRODUCTION............................................................................... 354
II. FAMILY LAW FRAMEWORK .......................................................... 357
III. EXTENDING FAMILY LAW TO ROBOT MARRIAGE ....................... 363
   A. Marriage to Robots .................................................................. 364
   B. Divorce from Robots ........................................................... 370
IV. CONCLUSION ............................................................................... 374

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Sophia is a Saudi Arabian citizen with a wicked sense of humor. She has a very expressive face and blue eyes.1 Flaunting her charm, Sophia has made the media rounds, including 60 Minutes and the Tonight Show.2 She has graced magazine covers and dated Will Smith.3 She also happens to be a social humanoid robot developed by Hong Kong-based company Hanson Robotics.4

Technology has made inroads in many fields, and family law has been no exception.5 Thus far, technology has expanded how people add children to their families. Soon, it may revolutionize whom people marry. Already, many people feel comfortable marrying those with whom online dating

4 See, e.g., Catherine Saez, Artificial Intelligence Is Changing Societies, But What Cost To Social Justice? Transparency Is Key, INTELL. PROP. WATCH (Dec. 22, 2017), http://www.ip-watch.org/2017/12/22/artificial-intelligence-changing-society-cost-social-justice-transparency-key/; Sophia, HANSON ROBOTICS, http://www.hansonrobotics.com/robot/sophia/ (last visited Nov. 3, 2018); Elizabeth E. Joh, Policing Police Robots, 64 UCLA L. REV. DISCOURSE 516, 523 (2016) (“Popular depictions of robots going back to the 1920s suggest robots are machines in humanoid form; think of the Maschinemensch in Fritz Lang’s 1927 film Metropolis, or Rosie the maid robot in the Jetsons. Yet robots neither have to look like people nor behave in any specific way. Robots can look like humans, animals, or insects; they can provide information, fire upon an enemy, or engage in financial trades. Indeed, there is no single definition of a ‘robot.’ An emerging consensus has suggested, however, that a robot be defined as any machine that can collect information, process it, and use it to act upon the world.”).
5 See F. Patrick Hubbard, “Sophisticated Robots”: Balancing Liability, Regulation, and Innovation, 66 FLA. L. REV. 1803, 1803 (2014) (“Our lives are being transformed by large, mobile, ‘sophisticated robots’ with increasingly higher levels of autonomy, intelligence, and interconnectivity among themselves.”). Much scholarship and thought has focused on the replacement of the worker with a robot and the increasing role of technology. Intellectual property law is often devoted to technology. Big data and electronic software has changed the way law is practiced. E-mediation is taking over in divorce proceedings. But, a quiet displacement can happen in the home, as well. See, e.g., Dafna Lavi, No More Click? Click in Here: E-Mediation in Divorce Disputes—The Reality and the Desirable, 16 CARDOZO J. CONFLICT RESOL. 479, 487 (2015).
services have matched them.\textsuperscript{6} 

Dating robots has increasingly become a possibility in the near future.\textsuperscript{7} One computer expert, David Levy, contends that if current technological advances continue, “[r]obots will transform human notions of love and sexuality. . . . Humans will fall in love with robots, humans will marry robots, and humans will have sex with robots, all as . . . ‘normal’ extensions of our feelings of love and sexual desire for other humans.”\textsuperscript{8} Levy predicts that this will happen by 2050.\textsuperscript{9} In addition to the technology having sufficiently advanced by then, humans will likely continue to have trouble getting and staying married to other humans, making robots more attractive as potential partners.\textsuperscript{10}

Robots have rapidly developed in recent years to improve people’s quality of life and welfare.\textsuperscript{11} For example, robots can offer assistance around the house, such as vacuuming.\textsuperscript{12} There are also sex robots and those that offer companionship.\textsuperscript{13} Future robots will be able to cook.\textsuperscript{14} If these traits are combined in one robot, that robot would embody what many people seek in their future spouses.\textsuperscript{15}

This potential future presents an opportunity to reexamine the meaning of family law—and its applicability to a changing world. Family law is often

\begin{itemize}
\item \textsuperscript{6} Phyllis Coleman, \textit{Online Dating: When “Mr. (or Ms.) Right” Turns Out All Wrong, Sue the Service!}, 36 OKLA. CITY U. L. REV. 139, 143 (2011).
\item \textsuperscript{8} DAVID LEVY, \textit{LOVE AND SEX WITH ROBOTS: THE EVOLUTION OF HUMAN-ROBOT RELATIONSHIPS} 22 (2007).
\item \textsuperscript{9} Id.
\item \textsuperscript{10} See infra Part III.
\item \textsuperscript{11} Roeland de Bruin, \textit{Autonomous Intelligent Cars on the European Intersection of Liability and Privacy: Regulatory Challenges and the Road Ahead}, 7 EUR. J. RISK REG. 485, 487 (2016).
\item \textsuperscript{12} M. Ryan Calo, \textit{Open Robotics}, 70 MD. L. REV. 571, 572 (2011) (“Personal robots under development are sophisticated and versatile. The Japanese company Kawada Industries recently released the HRP4, an all-purpose humanoid robot . . . .”).
\item \textsuperscript{13} See infra Part III.A.
\item \textsuperscript{15} One scholar has suggested that the traditional “essentials of marriage” are an exchange of financial support for domestic services, with sexual access and exclusivity included. Twila L. Perry, \textit{The “Essentials of Marriage”: Reconsidering the Duty of Support and Services}, 15 YALE J. L. & FEMINISM 1, 8–9 (2003). Indeed, in one survey of people engaged to be married, forty-two percent said they were marrying for love, thirteen percent said they saw it as a sign of commitment, and nine percent saw it as progress in their relationship. Three percent did not know why they were getting married. JONATHAN HERRING, \textit{FAMILY LAW} 44 (5th ed. 2011).
\end{itemize}
a step behind the development of technology\textsuperscript{16} for reasons that may range from society’s philosophy of marriage to the slowness with which families change.\textsuperscript{17} The law eventually catches up to reality, however.\textsuperscript{18} This Article is thus the first to consider the family law implications of the romantic relationships that computer scientists are predicting and working to develop.\textsuperscript{19}

Family law is a story of inclusion and exclusion.\textsuperscript{20} Certain relationships are excluded from recognition and others are included.\textsuperscript{21} For example, states prohibit polygamous marriages, marriages between some relatives, and marriages before a certain age.\textsuperscript{22} “The central dividing line in family law is marriage.”\textsuperscript{23}

This Article looks at how family law can apply to marriage between humans and robots, a future that researchers have been predicting.\textsuperscript{24} For skeptics of such a future, it is an interesting thought experiment, nonetheless. Part II of this Article begins by examining the current family law framework,

\textsuperscript{18} And there have already been major changes in family law: The values which informed the law back then were also very different. Marriage as an institution for the raising of children has largely been replaced by a notion of marriage as an agreement which is terminable at will. Many in the population forgo the need for any formal agreement or exchange of promises at all. While the significance of marriage in the law has declined, legislatures and courts are increasingly concerned to affirm the rights and obligations that flow from parenthood. It is a matter of conjecture what the next 40 years will bring. Patrick Parkinson, \textit{Forty Years of Family Law: A Retrospective}, 46 VICTORIA U. WELLINGTON L. REV. 611, 625 (2015) [hereinafter Parkinson, \textit{Forty Years}].
\textsuperscript{21} Katharine Silbaugh, \textit{Distinguishing Households from Families}, 43 FORDHAM URB. L.J. 1071, 1080 (2016) (“Family law pays attention to a particular set of relationships, and the rest are recognized incidentally for limited purposes.”).
\textsuperscript{22} See, e.g., John Witte, Jr., \textit{Why Two in One Flesh? The Western Case for Monogamy Over Polygamy}, 64 EMORY L.J. 1675, 1683 (2015).
\textsuperscript{24} See infra Part III.A.
focusing on property division and child-related matters. Part III explores the applicability of the family law framework to potential relationships between humans and robots. Part III concludes that, as difficult as it is to determine whether to recognize such marriages, dealing with their aftermath is even more difficult, challenging the applicability of the current family law framework to robot marriage.

II. FAMILY LAW FRAMEWORK

If people in the future marry robots, they will need to accept the family law implications. Yet, people do not really know the legal consequences of marriage. Each year, more than four million people marry in the United States, and approximately two million divorce. They venture into the realm of romance and have children despite knowing little about the family law framework that picks up the pieces of broken relationships. For example, most people do not know that the law treats non-married couples as strangers. Additionally, while most engaged couples think that they will never divorce, nothing could be further from the truth.

Family law is rooted in society’s perceptions of morality, common sense, and prevailing cultural norms. “Perhaps nowhere is the connection

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25 See, e.g., infra note 27; Iowa Legal Aid, Common Myths About Family Law, https://www.iowalegalaid.org/resource/common-myths-about-family-law?ref=3lwed (last visited Nov. 17, 2018); see also Kristin A. Collins, Federalism’s Fallacy: The Early Tradition of Federal Family Law and the Invention of States’ Rights, 26 CARDozo L. REV. 1761, 1860 (2005) (noting that family law is currently in the domain of the states, but that, historically, the federal government was not limited in this way); Courtney G. Joslin, Federalism and Family Status, 90 IND. L.J. 787, 789 (2015). But see Libby S. Adler, Federalism and Family, 8 COLUM. J. GENDER & L. 197, 199 (1999) (arguing that there is no foundation for the view that family law belongs in the state domain). Justice Antonin Scalia has expressed concern about the increasing federalization of family law:

I think it obvious... that we will be ushering in a new regime of judicially prescribed, and federally prescribed, family law. I have no reason to believe that federal judges will be better at this than state legislatures; and state legislatures have the great advantages of doing harm in a more circumscribed area, of being able to correct their mistakes in a flash, and of being removable by the people.


27 In several British surveys, the majority of people thought that cohabitants had the same legal status as married couples. SONIA HARRIS-SHORT ET AL., FAMILY LAW: TEXT, CASES, AND MATERIALS 109 (3d ed. 2015) (ebook).

28 See, e.g., Sean Hannon Williams, Sticky Expectations: Responses to Persistent Over-Optimism in Marriage, Employment Contracts, and Credit Card Use, 84 NOTRE DAME L. REV. 733 (2009).

and the tension between the individual and the collective more prominent than in family law . . . ”

At the same time, however, family law has a very practical function, being “generally viewed as a dispute, conflict, and lawsuit practice.”

For all its shortcomings, family law provides an institution to help divorcing couples restructure their families following the end of relationships.

Family law also protects the parties to marriage and divorce. Without family law, some people would not be compelled to support their children. Others would leave their marriage with all of the marital assets. Ultimately, the weakest members of the family would go unprotected. The role of family law is, thus, to protect the individual family members, as is clear from several family law doctrines. These include the nonintervention doctrine, the duty to support one’s spouse, the doctrine of necessaries, and the principles governing property division at divorce.

The nonintervention doctrine prevents courts from adjudicating issues arising in intact marriages. An important exception to this doctrine is the doctrine of necessaries, which allows courts to intervene if the earning spouse is not paying for the expenses incurred by the nonearning spouse for any items needed by the family. The couple’s means, social position, and circumstances usually determine necessity. In addition to this common law doctrine of necessaries, some states have codified a duty to support a spouse.

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37 See, e.g., Connor v. Sw. Fla. Reg’l Med. Ctr., Inc., 668 So. 2d 175, 175 (Fla. 1995) (“Under the doctrine [of necessaries], a husband was liable to a third party for any necessaries that the third party provided to his wife.”).
39 See Perry, supra note 15, at 13–14.
Currently, marriage can only occur when allowed by the state. Restrictions on who can marry include those based on age, family relation, and procedural requirements. Additionally, states ban polygamous marriages. The benefits of marriage that these couples cannot access include certain legal benefits and privileges, such as the marital estate tax exemption, social security survivor privileges, and inheritance law, which all favor spouses. Indeed, in every American jurisdiction, the legal rights and obligations of cohabitants are fewer than those of spouses.

When the family unit fails, the state intervenes. For instance, child support “[has] progressed from private, to state, then to federal remedies.” The government’s role in child support has increased as more children have become reliant on such support due to rising divorce and out-of-wedlock birth rates. When parents fail to financially support their children, public assistance substitutes. To protect children, Congress began legislating in family law in the twentieth century despite the field’s traditional position in

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40 See infra note 109.
43 For example, the spousal privilege regarding adverse testimony and confidential communications does not extend to cohabitating couples. See Katherine M. Forbes, Note, Time for a New Privilege: Allowing Unmarried Cohabitating Couples to Claim the Spousal Testimony Privilege, 40 Suffolk U. L. Rev. 887, 888 (2007). Also, “[c]ourts seem particularly hesitant to allow cohabitational partners to recover in tort actions, such as loss of consortium.” Alisha M. Carlile, Note, Like Family: Rights of Nonmarried Cohabitation Partners in Loss of Consortium Actions, 46 B.C. L. Rev. 391, 392 (2005). Another tort action for which unmarried cohabitants rarely recover is bystander recovery for negligent infliction of emotional distress. See Meredith E. Green, Comment, Who Knows Where the Love Grows?: Unmarried Cohabitants and Bystander Recovery for Negligent Infliction of Emotional Distress, 44 Wash. Forest L. Rev. 1093, 1093 (2009). Finally, cohabitants rarely have automatic inheritance rights. See Jennifer Berhorst, Note, Unmarried Cohabitating Couples: A Proposal for Inheritance Rights Under Missouri Law, 76 UMKC L. Rev. 1131, 1144 (2008). These are only a few examples of the marital privileges and obligations that cohabitants do not possess.
the state domain. For example, Congress amended the Aid to Families with Dependent Children program in 1950 to mandate that state welfare agencies alert enforcement officials when children receive benefits after their parents abandon them. Under the Act, state officials could locate the children’s parents and enforce their child support obligations. In addition, custodial parents must assign their right to child support to the state in exchange for public assistance, facilitating enforcement actions against the nonpayer parent.

States have become aggressive in their enforcement of child support. Enforcement techniques range from suspension of recreational licenses and work permits, to criminal prosecution and incarceration. The United States Supreme Court recently considered whether indigent parents facing imprisonment for failure to pay child support should receive state-appointed counsel, concluding that due process does not require it. Much of the family law addresses the distribution of property among family members, particularly to protect children. The law, therefore, offers family members certain rights and privileges, such as ensuring that the family’s resources are used to support them.

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47 See supra note 25.
49 BACKGROUND MATERIAL, supra note 48, at 8-5.
50 See Stacy Brustin & Lisa Vollendorf Martin, Paved with Good Intentions: Unintended Consequences of Federal Proposals to Integrate Child Support and Parenting Time, 48 IND. L. REV. 803, 805 (2015) (“TANF recipients must assign their rights to collect child support to the state. The state then initiates proceedings to establish parentage, if not already determined, and enter a child support order against the noncustodial parent even if the custodial parent would prefer not to do so.”).
52 See Margaret Campbell Haynes & Peter S. Feliceangeli, Child Support in the Year 2000, 3 DEL. L. REV. 65, 89 (2000); see also Solangel Maldonado, Deadbeat or Deadbroke: Redefining Child Support for Poor Fathers, 39 U.C. DAVIS L. REV. 991, 1000 (2006).
53 See Turner v. Rogers, 564 U.S. 431, 448 (2011). The state, however, must ensure “a fundamentally fair determination of the critical incarceration-related question” of whether the debtor parent is able to fulfill his or her support obligations. Id. at 435.
54 See, e.g., Morgan, supra note 46, at 196 (citing child support as an area of family law that the federal government has addressed).
55 See, e.g., Jana B. Singer, Divorce Obligations and Bankruptcy Discharge: Rethinking the Support/Property Distinction, 30 HARV. J. ON LEGIS. 43, 78 (1993) (noting that the distinctions between property and alimony awards have blurred).
While limits on the legal protection of children exist—often at the child’s age of majority—even these are blurred by the importance of the family’s function as an economic unit. For example, several states enforce parental economic support for adult children seeking a college education if the parents are divorced or unmarried.\textsuperscript{56} Such postsecondary educational support awards require parents to financially support their adult children. These laws vary by state, requiring different levels of parental involvement.\textsuperscript{57} While a few states have statutes permitting postsecondary educational support, other states have judicial precedent allowing it.\textsuperscript{58}

Postsecondary educational support has been justified by concerns that family support erodes for children upon their parents’ divorce. Postsecondary educational support thus helps equalize the economic situations of children of separated parents and those of married parents.\textsuperscript{59} There are no postsecondary educational support laws for children of intact families because it is assumed that the private safety net is secure in those families, which function as an economic unit without any intervention from the state.\textsuperscript{60}

At divorce, there is often a discussion of the family’s standard of living before and after the marriage.\textsuperscript{61} Children should have their reasonable needs

\textsuperscript{56} See, e.g., COLO. REV. STAT. § 14-10-115 (2018); IND. CODE § 31-16-6-2 (2018); see also Emily A. Evans, A Jurisprudence Clarified or “McLeod-ed”?: The Real Constitutional Implications of Court-Mandated Postsecondary Educational Support, 64 S.C. L. REV. 995, 995–97 (2013).

\textsuperscript{57} Some postsecondary educational support laws consider a parent’s financial ability to pay and the child’s academic ability to enroll in college, some ignore a parent’s role in choosing the college, and some provide parents access to the child’s college transcripts. See Anna Stȩpień-Sporek & Margaret Ryznar, Child Support for Adult Children, 30 QUINNIPIAC L. REV. 359, 365–68 (2012).

\textsuperscript{58} For an analysis of postsecondary educational support laws, see Madeline Marzano-Lesnevich & Scott Adam Laterra, Child Support and College: What Is the Correct Result?, 22 J. AM. ACAD. MATRIM. LAW, 335, 339–73 (2009).


\textsuperscript{60} During marriage, the courts do not intervene. The doctrine of necessities is an exception. Under this doctrine, the courts look to the couple’s standard of living to determine what qualifies as a necessity. See supra notes 36–38 and accompanying text. The duty to support a spouse is another exception. See supra note 39 and accompanying text.

\textsuperscript{61} See infra notes 62 and 64; see also Margaret F. Brinig, Contracting Around No-Fault Divorce, in THE FALL AND RISE OF FREEDOM OF CONTRACT 275, 277 (F.H. Buckley ed., 1999)
provided for by the noncustodial parent, often ensured by the child support guidelines of each state, which are prompted by federal law. Children, however, often have less claim to a parent’s property or income than a spouse, who presumably contributed to that property. In this way, divorce law privileges the spouse. For divorcing couples in certain states, the pre-divorce standard of living can be a factor in determining the amount of alimony that is due.

Family law, however, is not only about financial protection, at least when it comes to children. It is also about protecting the parent-child relationship and occasionally the child’s relationship with a non-biological parental figure. Thus, there has been a move toward shared custody between the parents and away from the former presumption in favor of the mother as the sole custodian. This illustrates another goal in child-related matters—the child’s best interests. (*A great deal of research suggests that children of parents who divorce will be worse off in the vast majority of cases. Children may lose out for a number of reasons. They will be poorer than those of intact families . . . .*); see also Nina Jafari, *The Marital Standard of Living*, 22 J. CONTEMP. LEGAL ISSUES 133, 133–35 (2015). But see Kelly Bedard & Olivier Deschénes, *Sex Preferences, Marital Dissolution, and the Economic Status of Women*, 40 J. HUM. RESOURCES 411, 413 (2005) (arguing that divorced women live in households with more income per person than never-divorced women).


Generally, children are entitled to be supported in a style and condition consonant with the position in society of their parents. A parent’s duty of support does not end with the furnishing of mere necessities if the parent is able to afford more. Support must be reasonable under the circumstances. How much “more,” i.e., what amount is “reasonable” is defined in relation to a child’s “needs” and varies with the circumstances of the parties. Id.; see also June Carbone & Naomi Cahn, *Nonmarriage*, 76 MD. L. REV. 55, 58 (2016).


See, e.g., Denise Lanuto, Comment, *Is Crews v. Crews Destined to Be the Next Circle Chevrolet?*, 32 SETON HALL L. REV. 837, 837 (2003) (“In *Crews v. Crews*, the [S]upreme [C]ourt [of New Jersey] ordered the lower courts to make specific findings on marital standard of living in all divorce cases where alimony is an issue, whether the issue is contested or uncontested.”). On the contrary, child support is usually determined by the state’s child support guidelines. Id.


position children for success and redress unfairness within families.68

The definition of “parent,” however, has been expanding with technology.69 “Today, the law increasingly accommodates families formed through [assisted reproductive technologies] and, in doing so, recognizes parents on not only biological but also social grounds.”70 There are, however, two separate sets of questions at issue regarding the definition of parent: “who” is a parent and “what” is a parent—namely, what are the parent’s roles, rights, and obligations.

As one of the oldest constitutional rights, the parental right has experienced a long period of change. Even the roles of family members in society have changed over the decades. Family law has been criticized for not keeping up with the modern family, and this is especially true when it comes to clarifying the roles of the parent and state in an increasingly complex world. It will thus be important for case law to better define the parental right in the future, as well as the level of scrutiny that should be applied to state laws that aim to restrict it.

In summary, family law governs marriage and divorce. American family law has developed over the centuries, but its application to human-robot marriage raises many questions, which are considered next.

III. EXTENDING FAMILY LAW TO ROBOT MARRIAGE

Robotics technology is not yet sophisticated enough to prompt the question of marriage between humans and robots, and thus, no legal consideration has been paid to it.71 It is not too early, however, to envision

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In contemporary discussions of family law, it is often claimed that parentage law seeks merely to identify and recognize biological parents. NeJaime shows that this claim is, at best, incomplete; the law has long recognized some nonbiological parents. However, the law’s recognition of nonbiological parentage has been “partial and incomplete.” Specifically, NeJaime demonstrates how the law recognizes nonbiological parenthood in asymmetrical ways.

Id.

71 See Deborah Zalesne, The Intersection of Contract Law, Reproductive Technology, and the Market: Families in the Age of ART, 51 U. RICH. L. REV. 419, 424 (2017) (“The lag of family law behind technology can be explained both by state legislatures remaining slow to expand statutory definitions of family, and by family law remaining doctrinally wedded to its patriarchal origins.”).
how the current family law framework would apply to this scenario, and to consider the changes that would need to occur for it to do so. “A new technology can expose the cracks in legal doctrine.” No doubt, the future will test the limits and boundaries of family law.

A. Marriage to Robots

A human desire for marriage to robots has not yet materialized much outside of science fiction. The line between human and machine is still too bright for this—just as people cannot marry a pet, they cannot marry a machine. Both would instead be considered property. Family law reflects and reinforces social conceptions of marriage, and so marriage to property such as robots is currently unthinkable. This is not to say, however, that this will not change. On the contrary, technology evolves quickly. Technology has a history of changing families and, therefore, family law.

Technology already plays a huge role in courtship. The Internet became publicly used only in the 1990s, and already millions of people date

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72 See, e.g., Ignatius Michael Ingles, Note, Regulating Religious Robots: Free Exercise and RFRA in the Time of Superintelligent Artificial Intelligence, 105 GEO. L.J. 507, 528 (2017) (“The prospect of robots being on par with or superior to humans forces us to reconsider our value systems and the laws we have enacted to protect these values.”).

73 Kaminski, supra note 45, at 661.

74 For relevant science fiction, see PHILIP K. DICK, DO ANDROIDS DREAM OF ELECTRIC SHEEP? 197 (1996); HER (Annapurna Pictures 2013).


76 This treatment of pets, however, is slowly changing. For example, they are being treated more like children in custody disputes. See Jessica Foxx, Comment, The Use of Agreements in the Resolution of Pet Custody Disputes, 85 UMKC L. REV. 455, 456 (2017).


78 See, e.g., Michael Guihot et al., Nudging Robots: Innovative Solutions to Regulate Artificial Intelligence, 20 VAND. J. ENT. & TECH. L. 385, 385 (2017) (“Advances in artificial intelligence (AI) technology are developing at an extremely rapid rate as computational power continues to grow exponentially.”).

79 Alternative reproductive techniques are a good example of this. See Zalesne, supra note 71, at 424.
online each month. In fact, the number of people who meet online may soon overtake those who meet through friends, church, or family, which all have been sinking in priority due to people’s busy lives. In one recent study, more than one in three respondents who married between 2005 and 2012 met their spouses online. Those who met online reported slightly higher marital satisfaction and slightly lower rates of marital breakups than those whose relationships began offline.

The Internet not only forms marriages, but can also play a role in ending them. For example, Facebook, the social networking giant, not only facilitates extramarital romances, but proves that they happened. In 2010, eighty-one percent of divorce lawyers surveyed by the American Academy of Matrimonial Lawyers saw an increase in the number of cases using social networking evidence in the last five years, with Facebook being the top source for online evidence. Much of this technology has ultimately disconnected people from each other. Many people have thus been struggling to marry each other and stay married. They even have trouble dating.

Meanwhile, robots have been increasing their presence in the world. They can nurse people back to health and care for the elderly in nursing homes. They have been integrated in both workplaces and personal

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80 See, e.g., Coleman, supra note 6, at 139.
82 William Harms, Meeting Online Leads to Happier, More Enduring Marriages, UCHI. NEWS (June 3, 2013), http://news.uchicago.edu/article/2013/06/03/meeting-online-leads-happier-more-enduring-marriages.
83 Id.; see also John T. Cacioppo et al., Marital Satisfaction and Break-Ups Differ Across On-line and Off-Line Meeting Venues, PROC. NAT’L ACADEMY SCI. U.S. (PNAS), June 18, 2013, at 1, http://www.pnas.org/content/early/2013/05/31/1222447110.full.pdf;
86 See supra Part II.
spaces,\textsuperscript{90} such as the Alexa personal assistant. Finally, robots have been used for sexual fulfillment. Indeed, sex dolls and sex technology fuel this growing industry. “Although still in its infancy, remote sex is now a reality.”\textsuperscript{91} Sex robots are even replacing humans in the sex industry.\textsuperscript{92}

All of these factors facilitate a potential move toward robot marriage. The question seems not to be whether this will happen, but when it will happen. Levy, a leading expert in artificial intelligence, argues that the entities we once deemed cold and mechanical will soon become the objects of real companionship and human desire.\textsuperscript{93} Likely to help is if robots take a physical form that mimics human beings.\textsuperscript{94}

Getting the physical attributes of a humanoid robot correct is not the only precursor to robot marriage. It is also important to create familiar mental attributes in the robot, including the emotional aspects of humanity. However, “[g]iven that social robots are designed to draw us in, often engaging us emotionally and building relationships with us, the robot itself could be deceptive in that it appears to have an emotional response to you but ‘in reality’ does not.”\textsuperscript{95} Engineering emotions in a robot will be a difficult step.\textsuperscript{96} Currently, artificial intelligence is about recognizing patterns. Scientists have been working on making robots learn by imitating humans rather than being programmed. For example, the Massachusetts Institute of Technology (MIT) announced in February 2018 the launch of a new initiative aimed at producing better artificial intelligence,\textsuperscript{97} one goal of

\begin{footnotesize}
\textsuperscript{90} See Kaminski, supra note 45, at 662.
\textsuperscript{91} Sandi S. Varnado, Avatars, Scarlet “A”s, and Adultery in the Technological Age, 55 ARIZ. L. REV. 371, 380 (2013).
\textsuperscript{93} LEVY, supra note 8, at 9.
\textsuperscript{94} “Robots can, of course, assume whatever form the designer desires, including human, animal, abstract, or strictly functional (as might be seen in an industrial enterprise).” David Allen Larson, Artificial Intelligence: Robots, Avatars, and the Demise of the Human Mediator, 25 OHIO ST. J. ON DISP. RESOL. 105, 105 (2010). “Robots are being developed that replicate human appearance and movement surprisingly accurately.” Id. at 108.
\textsuperscript{95} Woodrow Hartzog, Unfair and Deceptive Robots, 74 MD. L. REV. 785, 794 (2015).
\textsuperscript{97} Peter Dizikes, Institute Launches the MIT Intelligence Quest, MIT NEWS (Feb. 1,
ROBOT LOVE

which is to produce robots that learn to develop human adult thinking like children.98

The Turing Test, which measures a machine’s ability to exhibit intelligent behavior indistinguishable from that of a human, has been around since the 1950s.99 A robot passes the test if the human interrogator is unable to determine, during the course of a written conversation, whether the robot is a robot or a human.100 The first robot to pass the Turing Test did so in 2014, playing a Ukrainian teenager.101 While this is an example of limited machine learning, the future will have more sophisticated robots. One question is whether a robot would need to achieve a certain human age in the Turing Test to be eligible to marry. There are already age restrictions on when someone can marry.102 The Turing Test can also address the consent requirement for the robot because generally only adults can consent to marriage.103

The Turing Test can also address whether a robot can enter into premarital and postmarital agreements that permit couples to organize the financial terms not only of their potential divorce, but also of their marriage.104 Contracts between adults in romantic relationships have been recognized in family law, allowing people to contract into their own preferred relationship arrangements.105 The courts did not enforce premarital agreements in the United States until the 1970s, but couples now have more freedom of contract in this realm.106 Although couples may be limited in

102 See supra Part II.
104 See, e.g., Elizabeth R. Carter, Rethinking Premarital Agreements: A Collaborative Approach, 46 N.M. L. REV. 354, 355 (2016) (“Perhaps more importantly, premarital agreements may actually prevent divorce by prompting a couple to better define and communicate their expectations at the outset of the marriage.”).
contracting on issues related to their children, they enjoy significantly more freedom on issues of property. 107  They only must ensure the absence of duress, involuntariness, or unconscionability in their agreements. Additionally, the agreement cannot put either party in the position of requiring public assistance after the divorce. 108

While some view American family law as moving marriage from status (a public institution) to contract (a private arrangement), marriage very much remains a status that bestows upon its participants certain benefits and obligations even if they do not contract into them. 109  Sex robots arguably cannot be regulated due to the privacy of the home, 110 except when they pose a danger. 111  In contrast, marriage is a public institution and has been

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108  See IND. CODE § 31-11-3-8(b) (2018); see also Barbara Ann Atwood, Ten Years Later: Lingering Concerns About the Uniform Premarital Agreement Act, 19 J. LEGIS. 127, 153 (1993) (“The solicitude for divorced women manifested in the evolving law of spousal maintenance contrasts starkly with the U.P.A.A.’s policy of contractual autonomy. The U.P.A.A.’s ‘public welfare’ exception to the enforceability of premariatal agreements affecting spousal support looks only to absolute need and ignores other modern justifications for spousal maintenance . . . .”).


The persistence of status is evident, for example, in the continued limits that family law places on marriage formation. All states prohibit polygamous marriages, prohibit marriages between some relatives, and prohibit marriages before a certain age. . . . These laws are status rules set by the government and unalterable by the individuals involved. They limit a person’s ability to choose whom he will marry and when he will marry.

Id.  “Scholars describing the current contractualization of family law . . . cite the availability of no-fault divorce, the enforceability of prenuptial agreements about property distribution, and the enforceability of agreements between nonmarital partners.” Id. at 835–36. “But the status-to-contract story overstates the changes that have occurred in family law over time. It obscures . . . substantial evidence that supports a counter-narrative that could be told about family law, but is not: the story of the persistence of status rules denying individuals choice about the structure of their relationships.” Id. at 836.


They are “penumbral” liberty rights, like the rights to marital privacy, reproductive autonomy, and childrearing decisions, which have been deemed so fundamental to an American sense of liberty that the courts will closely scrutinize government interference with them. The scope of these fundamental rights is vague and contested, but the existence of unenumerated fundamental rights is settled law.

Id.

111  See generally Dr. Marie-Helen Maras & Dr. Lauren R. Shapiro, Child Sex Dolls and Robots: More than Just an Uncanny Valley, J. INTERNET L., December 2017, at 3.
regulated as such.

The question is whether these rights apply to robots, or whether it is sufficient that they apply to humans who want to marry robots. In other words, the ultimate question is whether robot-human marriage is about robot rights or whether it is about the right of a human to choose to marry a robot. This is relevant to whether robots can marry each other and humans.

One author notes that a large computer system may itself someday request to be treated as a person rather than as property. He contends:

that this entity should be granted a legal right to personhood if it has the following capacities: (1) an ability to interact with its environment and to engage in complex thought and communication; (2) a sense of being a self with a concern for achieving its plan for its life; and (3) the ability to live in a community with other persons based on, at least, mutual self-interest.112

Thus, while it has not yet happened, a technology that is capable of blurring the line between human and machine may raise the issue of marriage between them. Currently, marriage to robots is not compelling to people. The prevailing attitude on robot love, however, could shift under one main circumstance: if robots gain consciousness, making them more like people.

Marriage to robots could nonetheless be against public policy, depending on the state’s interests. There might be a concern about creating a substitute for marriage between humans, given that technology has already distanced people from each other.113 There are also ethical and philosophical questions about marriage to robots.114 This public policy position might have to be reevaluated, however, to protect the vulnerable party, if there is one. Perhaps the robot’s gain of consciousness would make it a vulnerable party, which family law would seek to protect.

Of course, there is always the possibility that, in the future, states get out of the business of marriage,115 as some commentators have urged.116

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113 See supra note 85 and accompanying text.
114 These questions are, however, beyond the scope of this Article.
116 E.g., Teri Dobbins Baxter, Marriage on Our Own Terms, 41 N.Y.U. REV. L. & SOC. CHANGE 1, 3 (2017).

Now that the Supreme Court has decided Obergefell, it is time to move the conversation beyond who the state can allow or forbid to marry and begin to consider whether state law should continue to regulate marriage at all; if so, we must decide whether and how the role of the state should change.

Id.; see also Aníbal Rosario-Lebrón, For Better and for Better: The Case for Abolishing Civil
Currently, “[m]ost marriages are governed by the terms of the state-supplied marriage contract.” 117 Indeed, there may be various legal changes by the time artificial intelligence develops into marital partners. 118

B. Divorce from Robots

Whereas there is state interference in getting married, there is mostly non-interference during marriage. 119 That changes, however, upon the divorce of the couple. 120 And, marriage is no longer devoid of the possibility of divorce. 121 Divorce implicates both property division and child-related questions.

The law has often gotten involved in relationships to the extent necessary to protect the vulnerable party. Examples include cohabitation contracts, estoppel, and common law marriage. 122 Family law in particular aims to protect the more vulnerable party to a marriage, 123 which raises not only questions regarding the vulnerability of a robot, but also the type and duration of that vulnerability. 124 It is unclear how such reasoning would apply to the case of marriage to robots. In particular, it is unclear who is the vulnerable party to the marriage—whether it is the human or the robot. The answer depends on many factors, such as how the robot has been programmed, including whether the robot was programmed to suggest or even compel marriage to the human, 125 which challenges the autonomy of spouses in this new scenario of robot marriage.

118 Parkinson, Forty Years, supra note 18, at 612 (“There is little of the family law landscape which remains the same as it was 40 years ago. The changes are vast, not only in substantive law but in terms of practice, procedure and the structure of the court system.”).
119 This is also due to the high level of scrutiny given to laws restricting marital privacy and parenthood. See, e.g., Margaret Ryznar, A Curious Parental Right, 71 SMU L. REV. 127, 128 (2018); see also supra Part II.
120 See supra Part II.
121 See Allison Anna Tait, Divorce Equality, 90 WASH. L. REV. 1245, 1246 (2015) (“First comes marriage; then comes divorce.”).
122 See Ji Hyun Kim et al., The Rise of PACS: A New Type of Commitment from the City of Love, 56 WASHBURN L.J. 69 (2017).
123 See Thomas Luchs, Is Your Client a Good Candidate for Mediation? Screen Early, Screen Often, and Screen for Domestic Violence, 28 J. AM. ACAD. MATRIM. LAW. 455, 455 (2016) (“One of the family law practitioner’s most important roles is that of protector.”).
124 See supra Part II.
125 Robots can be programmed to be deceptive or manipulative. See, e.g., Sabine Gless et al., If Robots Cause Harm, Who Is to Blame? Self-Driving Cars and Criminal Liability, 19 NEW CRIM. L. REV. 412, 412 (2016) (noting that computer programmers should be criminally liable for harm, but not robots because “they cannot conceive of themselves as morally responsible agents and because they cannot understand the concept of retributive punishment”); see also Hartzog, supra note 95, at 817.
The first step is thus to determine the vulnerable party in the marriage. While science fiction envisions a future run by powerful robots, it is not clear that humans will be more vulnerable. If robots are more powerful than humans, however, Isaac Asimov has asserted the common laws of robot behavior in science fiction. The First Law is that a robot may not injure a human. The Second Law is that a robot must obey the orders given by a human except when obeying such orders would conflict with the First Law. The Third Law is that a robot must protect its existence as long as such protection does not conflict with the First or Second Law. Thus far, however, these laws have largely been limited to science fiction, much like robot marriage.

If the robot is instead the vulnerable party, whether due to financial insufficiency or life expectancy, the concern is who would take care of the robot once its human no longer wants to do so. Perhaps someone else would take it into his or her household. Or, there is the possibility that the robot would be capable of supporting itself in the increasingly robotic workforce. The question thus is what the human’s obligations are toward the robot during and after a marriage. The converse question is important, as well: what are the obligations of the robot toward the human? For example, must the robot support the human in old age?

Thus, it is much more difficult to predict what a divorce from a robot would look like, and for this, family law may have to wait and see what robots will be like in the future. Relevant considerations include a robot’s life span and its ability for self-support. Indeed, it is not even known whether robots will live longer or shorter than human beings. Their end is also unclear—are they finite or are they infinite with maintenance?

Alimony-like support can be dependent on the duration of the vulnerability—would robots live much shorter or much longer than their

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127 Id.
128 Id.
129 Id. Asimov later added the “Zeroth Law,” which states: “A robot may not injure humanity or, through inaction, allow humanity to come to harm.” Jeffrey K. Gurney, Crashing into the Unknown: An Examination of Crash-Optimization Algorithms Through the Two Lanes of Ethics and Law, 79 ALB. L. REV. 183, 183 n.1 (2016).
human counterparts? Some state legislatures have recently limited the availability of alimony. What would happen, then, in the case of robots? What state of demise of the robot results in the end of alimony? And what if the goal of alimony is self-support?

The human life span and human vulnerabilities are known, even though they are slowly changing. Indeed, insurance companies bet on human lifespans because they are predictable. Furthermore, humans are capable of only a certain span of productive work. These are all unknowns for robots, however. Thus, not only does the current family law system not fit this scenario, but it is also difficult to build a new family law framework with so many unknowns. The divorce aspect of family law thus does not yet make sense in the robot context without further information about the future of robots and their role in society. In such unpredictable scenarios, the premarital agreement has been useful. Even if humans are more


135 See, e.g., Phyllis Hansen, Death and Remarriage as Alimony-Terminating Events: A California History, 22 J. Contemp. Legal Issues 534, 534 (2014) (noting that “[i]n California the default rule is that alimony entitlements terminate on the instant of either ex-spouse’s death or the supported ex-spouse’s remarriage.”).

136 See Rosanne Golob, The Role of the “Self-Support Goal” in Awarding and Modifying Alimony, 22 J. Contemp. Legal Issues 348, 348 (2011) (noting that “[t]oday . . . a court ordering spousal support must consider, inter alia, “[t]he goal that the supported party shall be self-supporting within a reasonable period of time.”


139 See Margaret Ryznar & Anna Stępień-Sporek, To Have and to Hold, for Richer or Richer: Premarital Agreements in the Comparative Context, 13 Chap. L. Rev. 27, 42–62 (2009).
vulnerable than robots, they can also benefit from a premarital agreement. 140

Relatedly, no-fault and unilateral divorces have become the hallmark of modern divorce law. 141 Fault continues to play a small role in divorce only in some jurisdictions. 142 The question is whether these characteristics of divorce law make sense in the context of robot marriage.

There is an additional financial element to divorce in the form of child support. The same unknowns that impacted the property distribution discussion inhabit the child-related space. It is unclear whether robots will earn money in the future to support themselves or any children of their marriage. If they do, with earning capacities that do not diminish like human capital, they might be financially liable for their family. 143

Courts consider the child’s best interests in making other child-related determinations, such as child custody and visitation. 144 The wishes of children often play a role in these considerations, especially if they are teenagers. 145 If adults can become attached to robots enough to marry them, no doubt children too can connect with them enough to want a continued relationship. The court’s custody and visitation decisions will be determined by whether the robot is more akin to a parent or a stepparent. Family law treats the biological parent more favorably than other parental figures, 146 but this may be slowly changing. 147

The related question of whether a robot can adopt a child is completely unclear. Perhaps adoption of the child by the robot is entirely unnecessary if the marital presumption of paternity applies. 148 Or, perhaps human children will be replaced by robot children in some cases, allowing the robot to create the child itself and gain parental status equivalent to a biological parent. Or, perhaps the robot child can simply be cloned upon divorce, with a copy being given to each parent.

140 Id.
141 See Hollander-Blumoff, supra note 30, at 511.
144 See supra Part II.
147 See supra Part II.
148 “In earlier times, the marital presumption of paternity [was] the presumption that a child is fathered by his or her mother’s husband.” Theresa Glennon, Somebody’s Child: Evaluating the Erosion of the Marital Presumption of Paternity, 102 W. VA. L. REV. 547, 551 (2000) (describing the weakening of the marital presumption of paternity by states over the years).
Thus, the inapplicability of the current family law framework to human-robot marriages poses issues. While the question of marriage is simpler, the divorce implications of property and child custody are far more complicated.149

IV. CONCLUSION

Marriage has slowed, but cohabitation has increased.150 Even though marriage has been the protagonist of recent judicial cases,151 marriage has become “a hallmark of privilege.”152 It is possible that people will continue to look to different structures for their intimate lives,153 especially when enabled by technology.

Indeed, robot marriage can be seen as a substitute for traditional families. Robots increasingly take on the duties of a spouse, such as completing tasks around the home. If sophisticated humanoid robots ever come into existence, people may thus want to marry them, which raises significant implications for family law and important questions for lawmakers. The possibility of such marriages certainly would require a reimagining of family law, which makes for an interesting exercise for scholars today.

149 Another difference between marriage and divorce is that “divorce jurisdiction requires the domicile of a party while marriage does not. ‘Domicile’ is the state where the party resides with the intent to remain. Divorce jurisdiction usually requires residence for six months to one year prior to filing.” Tracy A. Thomas, Same-Sex Divorce, 5 CAL. L. REV. CIR. 218, 219 (2014).


151 Albertina Antognini, The Law of Nonmarriage, 58 B.C. L. REV. 1, 3 (2017) (“Marriage is the unmistakable protagonist of Obergefell v. Hodges, the Supreme Court’s long-awaited decision recognizing the right of same-sex couples to marry.”).

152 JUNE CARBONE & NAOMI CAHN, MARRIAGE MARKETS: HOW INEQUALITY IS REMAKING THE AMERICAN FAMILY 19–20 (2014) (“For the majority of Americans who haven’t graduated from college, marriage rates are low, divorce rates are high, and a first child is more likely to be born to parents who are single than to parents who are married.”).

153 E.g., Silbaugh, supra note 21, at 1074 (“We are not a marriage population predominantly in practice, and children are not predominantly raised for 18 years by their two parents in a common household.”).